

# WHY AND HOW TO



## WHY SHOULD HOMEOWNERS BE CONCERNED ABOUT FUEL OIL SPILLS?

- Throughout the state, there are a number of significant discharges of fuel oil associated with the delivery of fuel. These problems include pumping fuel into inappropriate pipes (i.e. septic tanks, pipes that are no longer connected to a fuel tank in a home, monitoring wells), pumping fuel into structurally unsound tanks, or pumping fuel too quickly into empty tanks.
- Petroleum product spills detrimentally affect the environment by harming vegetation and wildlife. They pose a risk to human health by irreversibly polluting groundwater, septic systems and private wells. Homes may be made uninhabitable for months or years due to persistent odors or possible fire hazards. Clean up of even minor releases can cost thousands of dollars.
- Not every spill can be adequately prevented. If a spill does occur, start clean up as soon as possible. Be sure to contact your insurance company for financial assistance. Hazardous substance spills must be reported to the DNR's 24-hour toll-free hotline 1-800-943-0003. The Department recommends that you hire a trained environmental consultant to assist you with the cleanup.
- For more information on the spills program, visit the Department of Natural Resources Remediation and Redevelopment website at [www.dnr.state.wi.us/org/aw/rr/](http://www.dnr.state.wi.us/org/aw/rr/).
- For more information on above ground storage tank regulations, check out the Department of Commerce website at [www.commerce.org/](http://www.commerce.org/).
- For more information on home fuel oil cleanup and safety, see the Department of Health and Family services website at [www.dhfs.state.wi.us/](http://www.dhfs.state.wi.us/).

# PROTECT YOUR HOME FROM FUEL OIL SPILLS

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1. In late October 1997, a local oil distributor emptied 100 gallons of fuel oil into a basement oil tank with a disconnected line. Items in the basement as well as flooring and walls were flooded with oil before the substance leaked into the sump pump basin. Clean up cost \$105,000. As of February 2000, the family has been unable to move back into their home.
2. A church donated 300 gallons of fuel oil to a needy family in their congregation. When the family's dilapidated above ground storage tank was filled to capacity, it burst open and spilled fuel oil to the sandy soils around and under their home. Soils had to be excavated from around the home and hand dug from below the home. The spill occurred just 15 feet away from the family's private well which is being sampled for contamination on a quarterly basis.
3. The Marinette county wastewater treatment facility observed an unknown petroleum product draining into their plant. The product was traced back to a basement storage tank in a private residence. The tank's faulty valve discharged 100 gallons of heating oil into the basement and sanitary sewer. Cleanup cost \$4,000.
4. A rusted out above ground storage tank at a summer home allowed oil to leak out and kill vegetation around the tank. The spill necessitated excavation of surrounding soil. The home's foundation absorbed some product and cannot ever be adequately cleaned up.
5. In May 1999, an above ground storage tank's supporting stand sank into the ground causing the tank to fall over and spill 125 gallons of gasoline. A contractor was hired to excavate and stockpile contaminated soil. It took over four months for the gasoline to evaporate and the area to be made ready for backfilling.
6. Possible groundwater and surface water contamination occurred in Door County when a defective oil tank spilled. A newly installed 274 gallon tank developed a leak that released 129 gallons of fuel oil. Clean up costs totaled \$15,000.

# HOW TO PROTECT YOUR HOME



1. If you have a disconnected fill pipe that leads into your basement, you should cancel service with your fuel oil company immediately. In addition, remove the fill pipe or secure the cap with a bolt to make accidental filling more difficult (see first photo on left). Clearly mark any pipelines still in service for easy recognition.



2. Check your storage tank's stability. A typical 250 gallon tank supports a ton of fuel oil when full. This necessitates a strong and stable supporting structure. Have your tank's base inspected at least once a year. Storage tanks located on steep grades or exposed to weather conditions such as wind and thunderstorms are especially vulnerable. The second photo on the left details an unreliable support structure. Note the fallen oil tank on the ground behind the tractor tire.



3. Create a secondary containment system—one that has its base on an impermeable surface like concrete with a collection basin for potential spills. This protection is mandated by Wisconsin Administrative Code for new tank construction. Check with the Department of Commerce for further instruction.



4. Create easy accessibility. Fueling trucks should be able to fill your tank without bumping or disturbing your tank.

5. Check for leaks. Even occasional dripping could lead to contamination of your drinking water. Gasoline dissolved in ground-water is tasteless and may not be noticed when consumed. Changes in vegetation coloration around your tank may signal a spill (see third photo on left). Be sure to check that valves shut completely.



6. To prevent overfills, you should ensure that the fuel oil level gauge is functioning properly and is accurate. Specify the quantity of fuel needed to the supply company and request that your tank's size and quantity of fuel in the tank is verified before fueling. The last photo on the left shows fuel oil in a basement floor opening which resulted from an overfill.

7. Be an educated consumer. Choose a fuel oil company that you trust. Ask them if they have the experience and training to avoid spills due to improper filling technique. Remember that both you and the fuel oil supplier are liable for remediation activities. Establishing a relationship with a reliable company may reduce the potential for spills.